(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 27 January 2005 (27.01,2005)

PCT

(10) International Publication Number WO 2005/007792 A1

(51) International Patent Classification7:

C11D 11/04

(21) International Application Number:

PCT/KR2003/001456

(22) International Filing Date:

22 July 2003 (22.07.2003)

(25) Filing Language:

Korean

(26) Publication Language:

English

- (71) Applicant (for all designated States except US): CLENVI CO., LTD. [KR/KR]; #201 Eunsung Bldg., 624-6, Ilwondong, Gangnam-gu, Seoul 135-230 (KR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BAIK, Seung-Hak [KR/KR]; 625-1, Suksu 3-dong, Manan-gu, Anyang-si, Gyeonggi-do 430-043 (KR). LEE, Jae-Hong [KR/KR]; 12-156, Galhyun-dong, Unpyong-gu, Seoul 122-050 (KR).
- (74) Agents: LEE, Sel-Jin et al.; 17th Floor, City Air Tower, 159-9 Samsung-dong, Gangnam-gu, Seoul 135-973 (KR).

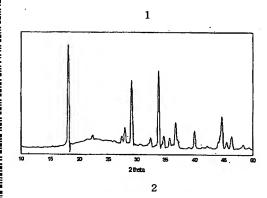
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report

[Continued on next page]

(54) Title: A PROCESS FOR PRODUCING A POWDER CONSISTING OF SODIUMSESQUICARBONATE AND LAYERED SILICATE



(57) Abstract: The object of the present invention is to provide a process of producing powder consisting of sodium sesquicarbonate and layered silicate, which includes (a) mixing a sodium silicate aqueous solution with a separately prepared sodium bicarbonate aqueous solution to produce a reaction solution, or mixing sodium silicate, sodium bicarbonate, and water with each other to produce a reaction solution, (b) heating the reaction solution to form slurry, and (c) drying the slurry to produce the powder. The process according to the present invention can simultaneously produce sodium sesquicarbonate and layered silicate easily at high yield. Furthermore, sodium sesquicarbonate contained in powder produced according to the process of the present invention has desirable quality regarding crystalline structure, particle size and density.











For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.